



## **Panel Discussion**

### **Can innovation systems help solve the food crisis? Experiences with international agricultural research and policy**

*Javier Ekboir*

#### **Issues for the debate**

The recent spike in the prices of agricultural commodities highlighted the important and multiple roles that agriculture still plays in the global economy: source of raw materials, generation of biofuels, a major component of consumption baskets (especially of poor households), an income source for the rural poor, a major influence in climate change and a source of migrants. The dynamics of the agricultural sector have changed in the last three decades in response to globalization, technical change, migration and environmental concerns. Globalization opened new agricultural markets (especially for high value products) and facilitated international exchanges of technical information. The rapid expansion of high value agriculture has sparked a debate on which are the most effective strategies to alleviate poverty and what role should innovation and scientific policies play in these strategies. On the one hand, rapid growth has been found to be the most effective way to reduce poverty. According to this reasoning, agricultural policies should prioritize the expansion of commercial agriculture over support for staple production. On the other hand, increasing production of the agricultural products most important for the poor can reduce food insecurity and trigger local innovation processes that expand local markets and, eventually, integrate into national or international markets.

These two strategies have also major implications for research and innovation policies. High value markets are usually more complex and demanding than markets for traditional products; therefore, innovations must combine technological and marketing aspects. Most of the innovations in high value markets have been introduced by the private sector or civil society organizations, while public research institutions have worked mostly in traditional products or topics that usually do not attract the private sector (e.g., management of natural resources). A focus on high value agriculture would require a redefinition of the role public research and extension organizations should play and the capabilities they develop. Since most technologies do not originate in the public sector, public researchers should focus on complementing the actions of other actors in the value chains. To fulfill their role, these researchers should change their vision of science and interact more closely with farmers and the private sector. Extension should not seek to pass information to farmers but to strengthen (or build) value chains where small farmers can thrive. This means that extension agents should concentrate in building individual and collective innovation capabilities.